layout in McElroy is not seen to lend itself to three groups and certainly does not suggest three groups in any fashion whatsoever. Particularly, since the point 310 is either an inlet or an outlet for the group 300, it is not seen how anyone could make a three group system leading that which is shown in Fig. 1 of McElroy. That is, if one were to convert McElroy into three groups, then the handling of the first two groups would have to be different than it now is. MPEP 2143.01 states "THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE". If there were three groups of fuel cells in McElroy, the point 310 could not service the group 300 as either an inlet or an exhaust. Therefore, McElroy cannot be said to suggest the three groups of fuel cells called for in lines 3-5 of claim 3.

Lines 6 and 7 of claim 3 call for "the number of fuel cells in each group exceeds the number of fuel cells in any group downstream thereof...". All that is suggested by McElroy with respect to the number of fuel cells in a group is directly opposite to that which is set forth in claim 3. Specifically, in column 7, lines 5-7, McElroy suggests "one-third of the fuel cells 150 contained in system 100 are contained in fuel cell stack 200 and two-thirds of fuel cells 150 contained in system 100 are contained in fuel cell stack 300." MPEP 2143.03 states "PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS". Clearly, McElroy does not disclose the language of lines 6 and 7 of claim 3; clearly, McElroy cannot suggest the language of lines 6 and 7 because McElroy teaches away from that language at the top of column 8.

Lines 10 and 11 require that the fuel inlet means is "operable in a second condition to cause fuel to flow directly from said source into each of said groups of fuel cells", meaning the three groups of fuel cells referred to hereinbefore. McElroy does not have a fuel inlet means that allows flow into three fuel cells, and therefore does not meet the language of lines 10 and 11 of claim 3.

Similarly, McElroy does not have a fuel outlet means that is "operable in a second condition to cause fuel to flow from each of said groups of fuel cells directly to exhaust", since there are three groups of fuel cells as referred to hereinbefore which McElroy does not suggest exhausting directly.

The last clause of claim 3 cannot be ignored: it requires transfer between purging and electricity producing. McElroy teaches transferring the settings in dependence upon low power or high power, but both conditions being electricity producing operation. The entire clause must be taken into account including "said first conditions during normal, electricity-producing fuel cell operation, and for setting said fuel inlet means and said fuel outlet means into said second conditions during purging of said fuel cell stack." Purging is not disclosed or suggested anywhere in McElroy. The rejection of claim 3 does not take into account all of the quoted language of claim 3 set forth hereinbefore. Therefore, claim 3 does not meet the requirements of MPEP 2143 by teaching or suggesting all claim limitations. Therefore, reconsideration and allowance of claim 3 over McElroy is hereby requested.

That McElroy cannot suggest three stacks, as set forth in claims 2 and 3, is clearly established hereinbefore. (Top of column 7, hereinbefore). In the rejection it is stated "Therefore, for high-power operation, the artisan would be motivated to use the opposite configuration, i.e., progressively decreasing stack sizes in the cascade." This does not follow: all that McElroy teaches is that if you go from his preferred embodiment to low power operation, you might have fewer cells in advance of a larger number of cells. This does not suggest that for high power operation you would do the opposite; it is simply a conclusion drawn in the rejection.

Lastly, the rejection states "Further, the artisan would be sufficiently skilled to modify the valve system of McElroy so as to render it suitable for a three-stack system." As described hereinbefore, the particular way that McElroy is laid out, with the point 310 either being the inlet or the outlet for fuel in the stack 300

precludes any obvious modification that would not alter the way the stacks 200 and 300 are handled in the actual disclosure of McElroy. If it could be done, then the Office is here challenged to show that it could be done: that is, if a third stack could also be brought into series or parallel with the other two, without altering how the stack 300 and the stack 200 receive and exit fuel depending on whether they are in series or parallel, then that should be shown, should be proven. MPEP 2144.04C. states "If Applicant Challenges a Factual Assertion As Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, The Examiner Must Support The Finding With Adequate Evidence". The applicant has pointed out the error in the Examiner's assertion, particularly the nature of the layout where the point 310 serves as both inlet and outlet. It is not sufficient that the Examiner declare one skilled in the art could make a three stack system out of McElroy; it must be shown that it can be done. Certainly, McElroy does not suggest how to do it; maybe McElroy suggests one might want to do it; but McElroy's configuration is such that either it cannot be done, or if it can be done, it can only be done by altering the configuration that is already there. This is impermissible in a prima facie obviousness rejection. Therefore, reconsideration and allowance of claims 2, 3, 5 and 6 over McElroy is hereby respectfully requested.

3. Claim 4 is rejected as obvious over McElroy in view of Chen et al (Chen). Equating the blower 420 to a valve is impermissible because the valve has to be part of the fuel inlet means settable in either of two conditions (which the blower is not) to either cause the fuel to flow directly from the source only to the first group of said cells or to cause the fuel to flow directly from the source into another group of cells. Since the blower 420 cannot contribute to that, it is not equivalent to a valve, without any regard to what Chen says. Furthermore, this is a semantic rejection. It is quite clear that all of the elements 420, 400 and 405 comprise a source of fuel in terms of the plain meaning of those words, most particularly in the light of the disclosure in this application, which determines the meaning of words in the claims.

The statement in column 8 of Chen does not alter the fact that nobody having any scientific training will believe that a blower can have the same effect as a valve in selecting which direction, among choices of direction, fluids will flow. In order for the valve of claim 4 to be part of "the fuel inlet means", it must select the direction of flow. There is no blower in Chen and certainly none in McElroy that can do that. Therefore, reconsideration and allowance of claim 4 over McElroy and Chen, in its own right as well as depending from claim 3 is hereby respectfully requested.

4. As stated hereinbefore, the fact that McElroy suggests one thing for low power operation does not teach one skilled in the art that the opposite will be true for high power operation.

The point about purging is that McElroy purges in one case as much as McElroy purges in the other case. There certainly is no selection between purging operation and electricity producing operation. McElroy does not "purge" in the sense described in the specification herein, and therefore does not meet the language of claim 3. Instead, McElroy has exhaust in either configuration, the exhaust simply being through one pipe or another.

Apparently, the rejection is trying to claim that when operating in parallel, the stack 300 will become purged of hydrogen-depleted fuel, and that therefore this is a purging configuration. One problem with that argument is that it relates only to the stack 300 of McElroy, and not to the stack 200 as well. Another problem with that argument is: both of those configurations are electricity-producing operations, and are not therefore, alternative to a purging operation. If purging occurs in both electricity-producing operations, or in only one of them, it is still not a selection between either producing electricity or purging as set forth in the last clause of claim 3.

5,6. The allowance of claims 7-11 is again noted with gratitude.

7. Should the foregoing not be persuasive, a telephone interview is solicited in order to clarify issues which are clearly seen in totally different fashions in this case.

Respectfully submitted,

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